



$$J^P = \frac{1}{2}^+$$

Status: \*

NODE=B198

OMITTED FROM SUMMARY TABLE

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 $\Xi_{bc}^0$  MASS
 

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NODE=B198M

NODE=B198M

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 $\Xi_{bc}^0$  MEAN LIFE
 

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NODE=B198T

NODE=B198T

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 $\Xi_{bc}^0$  DECAY MODES
 

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NODE=B198215;NODE=B198

Mode	Fraction ( $\Gamma_i/\Gamma$ )	Confidence level
$\Gamma_1 \quad D^0 \rho K^- \times B(b \rightarrow \Xi_{bc}^0)/B(b \rightarrow \Lambda_b)$	$<1.4 \times 10^{-5}$	95%

DESIG=1

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 $\Xi_{bc}^0$  BRANCHING RATIOS
 

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NODE=B198220

$$\Gamma(D^0 \rho K^- \times B(b \rightarrow \Xi_{bc}^0)/B(b \rightarrow \Lambda_b))/\Gamma_{\text{total}} \quad \Gamma_1/\Gamma$$

NODE=B198R01  
NODE=B198R01

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
$<1.4 \times 10^{-5}$	95	1,2 AAIJ	20AMLHCB	$pp$ at 13 TeV
<sup>1</sup> AAIJ 20AM reports upper limits for $[\Gamma(\Xi_{bc}^0 \rightarrow D^0 \rho K^- \times B(b \rightarrow \Xi_{bc}^0)/B(b \rightarrow \Lambda_b))/\Gamma_{\text{total}}] / [B(\Lambda_b^0 \rightarrow \rho D^0 K^-)] < 3.0 \times 10^{-1} - 1.7 \times 10^{-2}$ for the considered $\Xi_{bc}^0$ mass and lifetime hypotheses ranging from 6.7 to 7.2 GeV and from 100 to 500 fs. We use the $3.0 \times 10^{-1}$ limit for the quoted result.				
<sup>2</sup> AAIJ 20AM reports $[\Gamma(\Xi_{bc}^0 \rightarrow D^0 \rho K^- \times B(b \rightarrow \Xi_{bc}^0)/B(b \rightarrow \Lambda_b))/\Gamma_{\text{total}}] / [B(\Lambda_b^0 \rightarrow \rho D^0 K^-)] < 3.0 \times 10^{-1}$ which we multiply by our best value $B(\Lambda_b^0 \rightarrow \rho D^0 K^-) = 4.6 \times 10^{-5}$ .				

NODE=B198R01;LINKAGE=A

NODE=B198R01;LINKAGE=B

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 $\Xi_{bc}^0$  REFERENCES
 

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NODE=B198

AAIJ

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R. Aaij et al.

(LHCb Collab.)

REFID=60761